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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,000	09/20/2000	Richard Michael Roffers	15-XT-4847	6224

7590

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EXAMINER

CHURCH, CRAIG E

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/666,000

Applicant(s)

ROFFERS, RICHARD MICHAEL

Examiner

Craig E. Church

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for supplying the ion collection voltage and the grid focus voltage separately or at different times must be shown or the feature canceled from the claims. No new matter should be entered.

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an enabling disclosure and failing to support the invention as it is now claimed. There is no teaching in the original disclosure that electron focus and electron stopping voltages are applied to the grid by supply 124 in addition to the ion collection voltage at all much less at different times. Lines 8-10 of page 3 of the specification teach that supply 124 may be fixed, and in fact, it is symbolized in figure 1 as a battery. Lines 31-33 of page 3 of the specification imply that the ion collection voltage and the electron focus voltage are applied at the same time.

Claims 1-26 are rejected under 35 U.S.C. § 112, first

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paragraph, for the reasons set forth in the objection to the specification.

Claim 14 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The meaning of "an x-ray detector to receive the electron beam" in claim 14 unclear. An x-ray detector detects x rays (see the first paragraph of page 3 of the specification), not electrons as claimed.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-26 are rejected under 35 U.S.C. § 103 as being unpatentable over Baptist (6259765 PCT published 12/98). Baptist teaches an x-ray system comprising an x-ray tube having a vacuum housing 2, window 14, cathode 6, target anode 10, ion suppression

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grid 17, power supplies 28 and 29 and detector 32. See lines 35-40 of column 4 and 59-63 of column 6. The claims are rejected to the extent they are understood.

Applicant's arguments filed April 23, 2003 have been fully considered but they are not deemed to be persuasive. There is no teaching in the original disclosure that electron focus and electron stopping voltages are applied to the grid by supply 124 in addition to the ion collection voltage at all, much less at different times. Lines 8-10 of page 3 of the specification unequivocally teach that supply 124 may be fixed, and in fact, it is symbolized in figure 1 as a battery.

There is absolutely no teaching in the original disclosure that the ion collection voltage and the electron focus voltage are applied to grid 120 at different times as claimed. In fact, step 208 of figure 2 states

During x-ray tube operation, create ion collection voltage between the grid and filament bias connections to sweep ions out of the x-ray tube.

But tube operation comprises the generation of an x-ray beam which requires that grid 120 be biased for electron focussing, and the disclosure is defective for failing to teach how these two functions are to be accomplished. Furthermore, lines 31-33 of page 3 of the specification imply that the ion collection voltage and the electron focus voltage are applied at the same time.

Evaluation of applicant's response with respect to the Baptist patent will be held in abeyance until applicant submits convincing

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arguments to the 35 USC 112 first paragraph rejection.

Any inquiry concerning this communication should be directed to Examiner Church at telephone number (703) 308-4861.

*Craig E Church*

**CRAIG E. CHURCH**  
Senior Examiner  
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